
INDEX

CHEMICAL AND PETROLEUM ENGINEERING

Volume 12, Numbers 1-12, 1976

CHEMICAL AND PETROLEUM ENGINEERING

Volume 12, Numbers 1-12, 1976

(A translation of Khimicheskoe i Neftyanoe Mashinostroyeniye)

A

Abbasov, M. I. - 1017
 Abdurakhmanov, A. M. - 921
 Abduzhamalov, A. A. - 691
 Abovskii, S. Ya. - 646
 Abramenko, S. A. - 1114
 Agapov, G. I. - 526
 Agapov, N. N. - 936
 Agaverdieva, É. R. - 559
 Ageev, A. I. - 936
 Akab, A. E. - 382
 Akhmetzyanov, N. M. - 376
 Akopov, M. G. - 235
 Alekseev, Yu. V. - 743
 Alekseeva, M. A. - 573
 Aliev, K. B. - 1033
 Alievskaya, L. V. - 1020
 Ali-Zade, V. A. - 442, 917
 Al'tgovzen, B. A. - 576
 Amstislavskaya, S. I. - 682
 Andreev, G. Ya. - 809
 Anfimova, A. S. - 431
 Angelopulo, O. K. - 74
 Antipenkov, B. A. - 669
 Antosevich, K. G. - 125
 Arkhipov, A. N. - 892
 Arslanov, N. I. - 362
 Artamonov, A. V. - 379
 Artobolevskii, A. N. - 92
 Asadov, T. M. - 1017
 Ashcheulov, A. A. - 875
 Asner, V. I. - 1037
 Avdeev, V. I. - 741
 Aver'yanov, I. G. - 1077
 Avivo, N. D. - 88
 Avrushchenko, B. Kh. - 573

B

Babaev, S. G. - 442
 Babenko, T. V. - 52
 Babenko, V. E. - 902
 Babkina, V. Yu. - 148
 Bachkin, A. N. - 741
 Bagrintsev, I. I. - 184
 Baikov, V. P. - 501
 Bakakin, G. A. - 56
 Balan, L. N. - 56

Balandin, V. A. - 23
 Baokov, V. P. - 579
 Baranov, N. S. - 252
 Baranov, V. G. - 689
 Baranova, V. S. - 1105
 Basargin, A. P. - 1024
 Basargin, B. N. - 325
 Basko, V. P. - 423
 Basov, N. I. - 300, 875
 Batrakov, B. P. - 474
 Batrakov, V. N. - 449
 Bazhin, S. N. - 800
 Belikov, P. Ya. - 58
 Belinkii, A. L. - 616, 1091
 Belkin, M. I. - 71, 543
 Belomytsev, S. N. - 421
 Belous, K. P. - 825
 Bel'tyukov, A. V. - 108
 Belugin, V. P. - 286, 367
 Belushkin, V. A. - 936
 Belyakov, V. P. - 1043
 Belynskii, V. V. - 210, 629
 Berezhnov, Yu. M. - 905
 Berezin, I. V. - 802
 Berezovskii, L. B. - 702
 Berkovskii, M. A. - 232
 Berliner, Yu. I. - 31, 1105
 Bershtadt, Ya. A. - 719
 Bespalov, A. V. - 419
 Bessonov, A. I. - 905
 Bikhman, R. B. - 509
 Biryukov, A. I. - 1006
 Bitinskaya, L. N. - 800
 Blashchuk, V. E. - 618
 Blyukher, B. G. - 163, 1108
 Bobrov, V. A. - 263
 Bodnya, V. A. - 526
 Bogachev, V. M. - 15
 Bogomol'nyi, M. G. - 832
 Bogoyavlenskii, K. N. - 802
 Boldyrev, A. F. - 905
 Bolek, M. - 602
 Bolotov, L. T. - 575
 Bondarenko, B. I. - 1052
 Boreimagorskaya, L. A. - 388
 Borisov, V. M. - 125
 Borsuk, E. G. - 400, 868
 Bortnikov, I. I. - 685
 Brailovskii, M. I. - 186

Braker, É. E. - 460
 Braun, V. M. - 329
 Brif, V. M. - 620
 Brodyanskii, V. M. - 43
 Bronfenbrener, A. V. - 873
 Bruk, O. L. - 832
 Bulatov, A. S. - 568
 Bulatov, Yu. P. - 267
 Burenin, V. V. - 488, 659, 751, 859, 966
 Burmistrova, L. K. - 610, 898
 Burov, V. I. - 88
 Bush, V. V. - 283
 Bushukhin, E. F. - 27
 Bychekova, A. V. - 908
 Bykov, A. A. - 66
 Bykov, A. V. - 1102

C

Chamin, A. F. - 155
 Chechetkin, A. V. - 1080
 Chechik, E. M. - 1061
 Chechulin, V. A. - 611
 Chegurko, L. E. - 218
 Chegurko, V. E. - 218
 Chekhov, O. S. - 35
 Chepelov, V. A. - 814
 Cheremisinov, E. M. - 449
 Chernikova, I. E. - 809
 Chernov, A. P. - 67
 Chernov, V. Yu. - 1093
 Chernyavskii, A. N. - 554
 Chernyi, A. P. - 674
 Chernykh, L. P. - 245
 Cheskis, Kh. I. - 540
 Chigrina, I. P. - 817
 Chistyakov, F. M. - 483
 Chivyaga, A. A. - 786
 Chub, E. G. - 148
 Chufarovskii, V. S. - 513
 Chumakov, V. M. - 672
 Chunaev, V. V. - 611

D

Danilin, N. Ya. - 594
 Darii, A. T. - 1095
 Davydov, A. V. - 669

Del', G. D. - 110
 Demidova, L. N. - 19
 Dem'yanova, E. M. - 133
 Dibner, V. S. - 220
 Dimentova, A. A. - 198
 Dmitrienko, T. A. - 250, 359
 Dmitriev, O. A. - 177
 Dobronravov, V. A. - 610
 Dobryanskii, A. M. - 189
 Dodin, N. P. - 1037
 Dolzhnikov, V. V. - 739
 Domashenko, A. M. - 789, 825
 Domashnev, A. D. - 408
 Dorofeev, V. F. - 150
 Doroshenko, P. A. - 620
 Drankovskii, I. K. - 1037
 Drevin, A. K. - 971
 Drigo, V. A. - 309
 Dru, M. G. - 119
 Dubinchuk, F. F. - 10
 Dubinskii, M. G. - 119
 Dubrovskii, É. V. - 92
 Dudko, B. N. - 865
 Dugach, A. D. - 192
 Durzhnov, V. G. - 1025
 D'yakov, V. G. - 453

E

Efimov, A. V. - 452
 Efremova, N. A. - 765
 Egorov, I. A. - 1073
 Elfimov, I. A. - 694
 Eminov, E. A. - 719
 Epifanova, V. I. - 990
 Ereemev, V. B. - 703
 Eremina, N. N. - 938
 Ermakov, V. I. - 596
 Ermoshin, D. A. - 256
 Erofeev, A. A. - 881
 Ershov, V. I. - 709
 Esin, B. A. - 307
 Éskin, G. G. - 374
 Étin, Z. M. - 559
 Evdokimov, Yu. A. - 271
 Evdokimova, V. S. - 287
 Evseeva, V. G. - 1027
 Ezhov, A. T. - 1097
 Ezhov, V. A. - 256

F

Fedorenko, V. F. - 513
 Fedorov, I. V. - 643
 Fedosov, V. V. - 259
 Feduleev, Yu. A. - 172
 Feld'dman, E. B. - 985
 Fel'dman, Yu. Ya. - 155

Fetisov, Yu. N. - 886
 Filatov, S. N. - 408
 Filippov, E. S. - 488
 Filippov, V. V. - 267
 Fomin, L. A. - 279
 Forostyan, Yu. N. - 340
 Freid, M. Kh. - 471
 Frenkel', M. I. - 727
 Frid, V. L. - 194
 Fridman, M. L. - 521, 606
 Fuks, M. L. - 694

G

Gabeskiriya, O. V. - 141
 Gaevik, D. T. - 751
 Gafurova, A. N. - 372
 Galai, V. P. - 1116
 Galezha, V. B. - 1077
 Gal'tsov, V. Ya. - 131
 Gapunina, O. V. - 148
 Garaev, A. I. - 73
 Garbuzov, Yu. K. - 397
 Gasanov, A. P. - 442, 713, 917
 Gavrikov, V. P. - 119
 Gavrikov, V. V. - 460
 Gdalin, S. I. - 38
 Gel'man, A. S. - 905
 Gel'perin, N. I. - 325, 599, 786,

1073

Geokhchaev, T. G. - 1017
 Gerasimenko, G. I. - 431
 Gerasimenko, G. P. - 794
 Gerasimenko, S. S. - 516
 Gershanov, V. S. - 1037
 Gidon, L. M. - 814
 Gitsevich, G. A. - 669
 Gladchenko, A. I. - 652
 Gladynets, V. P. - 47
 Glagolev, N. I. - 472
 Glazov, Yu. G. - 557, 813
 Gleikh, A. M. - 431
 Glikman, L. A. - 895
 Glikman, L. S. - 453
 Globin, N. K. - 634
 Glushko, I. K. - 382, 769
 Gnatishin, V. A. - 743
 Godunov, I. I. - 1085
 Gokun, M. V. - 224
 Golubev, V. I. - 312
 Golubkovich, A. V. - 332
 Gonchar, V. E. - 382
 Goncharov, M. G. - 86
 Gopin, V. R. - 1077
 Gorelov, V. E. - 996
 Gorlov, Yu. P. - 256
 Gorokhov, E. D. - 349, 1008
 Gorokhov, V. A. - 439

Goryainova, A. V. - 145
 Gorzii, V. I. - 58
 Gotlib, L. I. - 457
 Govorin, E. V. - 345
 Grachev, V. A. - 155
 Gridin, I. D. - 653
 Grigor'ev, V. A. - 431
 Grinblat, M. M. - 91
 Grishkevich, A. V. - 61
 Gruzintsev, G. I. - 516
 Gryaznov, V. V. - 624
 Gubanov, A. P. - 908
 Gubarev, M. K. - 895
 Guida, A. F. - 634
 Gukasyan, G. A. - 189
 Guliev, S. G. - 857
 Gulyaev, F. A. - 426
 Gurevich, E. S. - 119
 Gurevich, I. S. - 1054
 Gurevich, L. M. - 1049
 Gurevich, M. A. - 873
 Gusakov, B. F. - 23
 Guseva, L. V. - 283
 Guseva, Z. F. - 551
 Gutkin, M. I. - 689
 Gzovskii, A. S. - 776

I

Ibakhin, S. I. - 554
 Idiatulin, R. A. - 921
 Ikhlévich, E. G. - 646
 Iokhvedov, F. M. - 47
 Isachenko, A. A. - 436
 Ismailov, D. G. - 559
 Isyukin, I. P. - 241
 Ivakin, O. A. - 990
 Ivantsov, V. V. - 110, 1052
 Ivanyuk, V. A. - 933

K

Kabel'skii, M. I. - 1116
 Kachura, V. P. - 789
 Kagan, V. L. - 620
 Kaganer, M. G. - 886
 Kalinicheva, N. B. - 245
 Kalnin', I. M. - 483, 1102
 Kamakin, N. I. - 52, 460
 Kamalov, G. K. - 548
 Kaminskii, Ya. A. - 643
 Kan, K. D. - 1077
 Kanevskii, M. V. - 924
 Karasev, I. N. - 238, 496, 776
 Karasik, I. I. - 189
 Karlik, E. M. - 548
 Karmatskii, Yu. I. - 584
 Karpinskii, Yu. I. - 504

Karpov, V. M. - 611
 Katalov, V. I. - 325
 Kats, A. G. - 362
 Khait, E. L. - 560
 Kharitonov, V. K. - 842
 Khimach, B. V. - 761, 1054
 Khimchenko, N. V. - 263
 Khmelev, S. A. - 823
 Khokhlova, L. N. - 895
 Kholin, B. G. - 138
 Khomko, A. Ya. - 902
 Khomutov, N. A. - 359
 Khrantsova, H. P. - 938
 Khusainov, R. S. - 589
 Kim, V. S. - 1069
 Kipriyanov, Yu. I. - 16
 Kirillina, G. P. - 1117
 Kirillov, V. L. - 1121
 Kirnyi, L. G. - 138
 Kirsanov, Yu. G. - 691
 Kiselev, E. I. - 172
 Klimenko, A. T. - 724
 Klimova, G. V. - 50
 Klinov, I. Ya. - 797
 Klockhov, V. V. - 160
 Kobzev, V. S. - 35
 Kochevskii, N. N. - 1006
 Kochkin, G. M. - 450
 Kogan, E. G. - 477, 900
 Koldashov, A. N. - 776
 Kolosova, L. P. - 343
 Komissarov, A. M. - 436
 Komlev, A. F. - 575
 Kononenko, B. N. - 807
 Konoplenko, V. I. - 58
 Konyukov, A. D. - 794
 Korneev, B. F. - 569
 Korolev, N. M. - 152
 Koroleva, N. L. - 719
 Korotaev, V. M. - 131
 Koryagin, A. A. - 624
 Kosmatov, S. L. - 492
 Kosorukov, D. S. - 814
 Kostin, V. M. - 513
 Kostov, P. D. - 516
 Kostromina, O. N. - 1035
 Kostyuk, V. I. - 697
 Kotlyar, V. A. - 163
 Kotlyarov, G. G. - 205, 416
 Kotsur, V. S. - 340
 Koval', Zh. A. - 419
 Koval'chuk, S. A. - 838
 Kovalenko, V. P. - 892
 Kovalev, E. M. - 594
 Kovergin, A. D. - 114
 Kozlov, K. A. - 823
 Kozlov, Yu. I. - 352, 706, 1011
 Krakopol'skii, S. É. - 286

Kramer, I. D. - 362
 Krasnikova, O. K. - 241
 Krasnopol'skii, G. M. - 106
 Krasutskii, G. A. - 697
 Kravchenko, V. A. - 474
 Kristal', M. M. - 50
 Krivokon', V. A. - 395
 Krotov, B. S. - 184
 Kruglov, S. A. - 232
 Krutik, A. B. - 1019
 Krymskii, D. M. - 1095
 Kryuchkov, K. N. - 79
 Kryukov, G. V. - 141
 Kudra, N. S. - 210
 Kudryashov, E. A. - 163
 Kudryashova, R. I. - 691
 Kudryavskii, N. P. - 807
 Kudryavtsev, I. V. - 403
 Kudryavtseva, B. M. - 778
 Kukhar', N. D. - 64
 Kulagin, Yu. P. - 27
 Kuleba, V. P. - 106
 Kuleshov, O. G. - 419
 Kulikov, Yu. F. - 523
 Kulizade, A. A. - 1017
 Kuntyshev, V. B. - 47
 Kupriyanov, V. V. - 88
 Kurlyand, Yu. A. - 421
 Kurmanaevskii, V. V. - 606
 Kurtashkin, N. N. - 528
 Kusanov, V. G. - 573
 Kushakov, V. I. - 809
 Kushner, G. F. - 929
 Kutepov, S. M. - 1057
 Kutukov, A. A. - 1001
 Kutukov, V. E. - 938
 Kutyakov, V. S. - 908
 Kuz'min, G. S. - 800
 Kuz'min, Yu. K. - 91
 Kuznetsov, V. V. - 902
 Kuznetsov, V. Yu. - 1114
 Kuznetsova, G. E. - 898
 Kuznetsova, O. V. - 397
 Kuzyakov, A. E. - 106
 Kuzyukov, A. N. - 702

L

Lapin, A. I. - 205
 Lapitskii, G. G. - 955
 Lapkin, S. A. - 902
 Larionov, G. G. - 650
 Larionov, I. G. - 1035
 Larionova, R. F. - 700
 Lashchinskii, A. A. - 19
 Lashuk, S. V. - 1052
 Lavrent'ev, A. I. - 1116
 Lazarev, G. E. - 778, 1085

Lebas, E. P. - 909
 Lebedev, B. L. - 634
 Lebedeva, N. S. - 450
 Ledyayev, B. L. - 836
 Legostaev, V. L. - 114
 Leonov, A. P. - 317
 Leont'eva, L. L. - 1020
 Lepekhin, G. I. - 519
 Leshchenko, M. I. - 446
 Lev, V. Z. - 429
 Leverash, V. I. - 538
 Levin, V. A. - 245
 Levitskii, S. N. - 457
 Levitskii, S. P. - 575
 Levshenko, N. I. - 86
 Levtonova, N. M. - 540
 Liberov, B. I. - 207
 Lidman, G. I. - 923
 Ligun, D. Ya. - 465
 Lin, S. T. - 706, 1011
 Lipmanovich, V. Yu. - 472
 Livshits, V. I. - 971, 1020
 Lobkov, A. N. - 1001
 Logvinova, A. M. - 66
 Lozhkin, V. A. - 892
 Lubenets, L. S. - 340
 Lugantsev, L. D. - 1040
 Luk'yanenko, V. M. - 949
 Luk'yanov, V. P. - 160, 349, 1008
 Lyalin, A. E. - 317
 Lyashkov, V. I. - 412
 Lykov, M. V. - 141
 Lyshevskii, A. S. - 1001
 Lysko, P. M. - 12
 Lyubomirskii, O. V. - 933

M

Makarov, V. A. - 340
 Makarov, V. M. - 849
 Makarova, L. S. - 431
 Makhonin, S. I. - 985
 Makushkin, A. P. - 523
 Malakhova, É. K. - 337
 Mal'tsev, V. G. - 501
 Malysheva, O. N. - 700
 Malyutina, É. D. - 229
 Mamedov, F. G. - 559
 Manivchuk, S. D. - 395
 Marchenko, A. N. - 426
 Markeev, M. A. - 709
 Martynets, Yu. M. - 786
 Martynov, A. V. - 470
 Maslak, G. A. - 291
 Maslennikov, S. N. - 81
 Matveev, B. D. - 323
 Mazo, M. D. - 201

Medrish, I. N. - 52
 Medvedev, G. V. - 538
 Medvedev, Yu. S. - 453
 Meleshko, O. I. - 271
 Mel'tser, V. L. - 329
 Meshcheryakov, E. A. - 1040
 Mezhuiev, V. V. - 875
 Mikhailov, G. G. - 238
 Mikhailov, S. N. - 521, 606
 Mikhailova, A. F. - 540
 Mikhailova, M. V. - 521
 Mikhalev, M. F. - 133
 Mikhailin, V. M. - 1085
 Milanchev, V. S. - 569
 Mil'chenko, A. I. - 133
 Minaev, Yu. V. - 86
 Minin, V. S. - 735
 Mironov, G. I. - 77
 Mironov, V. I. - 501
 Mirzabekov, R. M. - 1033
 Mishin, B. P. - 372, 1118
 Mishnin, B. V. - 289
 Mizonov, V. M. - 168
 Mkrtychan, Ya. S. - 367
 Mochalova, T. F. - 800
 Modestov, B. S. - 86
 Molchanova, V. D. - 838
 Morozov, Yu. M. - 566
 Moseichuk, K. A. - 27, 117
 Moskvina, N. I. - 616
 Mosolov, V. I. - 1040
 Mostalygin, G. P. - 1015
 Mosyak, A. A. - 516
 Motoshkov, I. A. - 82
 Motoshkov, V. I. - 82
 Mukhin, Yu. O. - 1102
 Muslaev, I. M. - 238

N

Nadiktov, V. N. - 64
 Nadzharov, O. E. - 114
 Nastasyuk, I. G. - 557, 813
 Nazarova, G. A. - 571
 Neiman, E. Ya. - 320, 865
 Nekhaichik, V. Ya. - 813
 Neprin, V. I. - 277
 Nesterovich, A. A. - 309
 Neupokoev, G. I. - 691
 Nikiforov, N. I. - 345
 Nikiforova, V. V. - 19
 Nikolaev, V. A. - 913
 Nikol'skii, V. A. - 43
 Novikov, A. I. - 611
 Novikov, A. Ya. - 488
 Novikov, V. P. - 640
 Novitskii, V. S. - 624

O

Obnovlenskii, P. A. - 873
 Obrushnikov, L. V. - 160, 349, 1008
 Obushenkov, G. I. - 88
 Ogur'tsov, B. I. - 58
 Olerinskii, B. I. - 873
 Omel'chenko, P. A. - 64
 Onatskii, P. A. - 576
 Onoprienko, L. M. - 618
 Opanasyuk, V. P. - 765
 Orekhov, O. I. - 287
 Orlov, G. A. - 1107
 Orlov, V. G. - 783
 Orlov, V. N. - 1015
 Orlova, G. S. - 783
 Orlovskaya, M. B. - 596
 Oshchepkov, Yu. P. - 902
 Oshchepkova, N. V. - 902
 Ositinskii, B. L. - 423, 839
 Ovcharenko, V. N. - 58, 61, 1087
 Ovseenko, A. N. - 1100
 Ozhiganov, Yu. G. - 895

P

Paikin, I. Kh. - 969
 Pakhomov, V. S. - 797
 Panov, Yu. G. - 748
 Pavlechko, V. N. - 685
 Pavlushenko, I. S. - 685
 Pedriiko, S. V. - 64
 Perestoronin, G. A. - 669
 Perfil'ev, A. N. - 343
 Perin, Yu. I. - 610, 653, 898
 Permyakov, B. A. - 892
 Pertsev, L. P. - 594
 Petrakov, V. N. - 653
 Petrokas, L. V. - 584
 Petrosyants, A. A. - 367
 Petrosyants, E. A. - 74
 Petrov, B. A. - 1069
 Petrovskii, E. B. - 530
 Petykhina, G. N. - 881
 Pichugin, V. F. - 74
 Piir, A. E. - 47
 Pimshtein, P. G. - 868
 Pivovarov, A. P. - 492
 Plyshevskii, V. V. - 543
 Plyusnin, Yu. G. - 551
 Podlesnyi, A. M. - 304
 Podlipskii, M. F. - 969
 Podol'skii, B. A. - 56
 Pogodin, V. K. - 971
 Pokrovskaya, N. B. - 58

Polyakov, E. N. - 528
 Ponomarenko, V. G. - 421
 Popov, S. P. - 400
 Pospelov, F. M. - 128
 Posternak, A. G. - 765
 Pozdeev, V. N. - 613, 1013
 Pozdnyakova, S. I. - 913
 Preis, G. A. - 554
 Preobrazhenskii, P. A. - 521
 Prilutskii, Ya. Kh. - 472
 Prodan, V. D. - 566
 Pron'ko, V. G. - 241
 Protasov, V. N. - 643
 Pulin, V. N. - 506, 583
 Putilovskii, F. D. - 535
 Putsev, I. I. - 523
 Pyshehev, F. N. - 530
 Pyshkin, V. A. - 1114
 Pyshkina, N. I. - 678

R

Rabinovich, A. N. - 909
 Rachkov, V. I. - 1057
 Radushkevich, V. L. - 832
 Radzievskii, V. N. - 1093
 Razvadovskii, Yu. M. - 526
 Razzhivin, V. I. - 457
 Rebenko, S. A. - 184
 Rebenkova, I. S. - 145
 Rekstin, F. S. - 198, 576
 Reusov, A. V. - 235
 Reusova, L. A. - 235
 Rezakova, N. P. - 320
 Rodina, L. M. - 71
 Rodionov, V. A. - 551
 Rozenoer, T. M. - 510
 Rozenshtein, I. E. - 220
 Rozhkov, V. F. - 765
 Rubenchik, Yu. I. - 453
 Rublev, V. I. - 647, 933
 Rudoi, Yu. M. - 286
 Rumyantsev, V. A. - 343
 Ryabchuk, G. V. - 519
 Ryadov, V. A. - 119
 Rybin, V. K. - 329
 Rykov, I. I. - 1085
 Rykova, B. G. - 516
 Rymar', V. I. - 1093
 Ryumin, S. V. - 644, 744

S

Saburov, V. P. - 467
 Safronkin, G. D. - 1037
 Sagalaev, G. V. - 38
 Sagratyan, M. A. - 378

Salakhiev, R. Kh. - 289
 Salazkin, K. A. - 1069
 Sal'nikov, G. A. - 8
 Sannikov, A. A. - 215, 731
 Saparkin, M. I. - 77
 Sataev, R. A. - 575
 Savochkin, V. R. - 52
 Sedov, V. I. - 374
 Selievskii, O. D. - 523
 Selitskii, F. I. - 769
 Semenikhin, A. S. - 663
 Semenov, V. G. - 38
 Semenov, V. Ya. - 1035
 Sergiev, B. P. - 1064
 Serova, S. L. - 241
 Serovski, L. A. - 694
 Shabanov, A. A. - 938
 Shabyshev, L. A. - 722
 Shakhova, N. A. - 781
 Shapkhaev, V. A. - 1080
 Shaposhnikov, V. A. - 890
 Shapovalova, O. G. - 781
 Sharenko, D. G. - 1121
 Sharikov, Yu. V. - 235
 Shataev, E. V. - 979
 Shateev, V. P. - 160
 Shchepotkin, Yu. I. - 71
 Shcherbakov, V. D. - 669
 Shcherbakova, T. S. - 523
 Shchuplyak, I. A. - 133
 Shchur, S. G. - 133
 Shebeko, M. P. - 523
 Shebitchenko, V. G. - 650
 Shelentov, G. M. - 618
 Shein, M. D. - 1024
 Sherman, I. G. - 718
 Sherstyuk, A. N. - 510
 Shilin, A. N. - 909
 Shipilov, V. D. - 700
 Shipunov, G. G. - 58
 Shirinov, M. G. - 1017
 Shironin, V. I. - 355
 Shiryaev, A. N. - 1117
 Shkola, P. A. - 175
 Shkolyar, P. S. - 168
 Shkoropad, D. E. - 309
 Shkret, L. Ya. - 1001
 Shlau, A. V. - 1037
 Shmelev, V. G. - 538
 Shmuilov, N. G. - 483
 Shmul'yan, I. K. - 419
 Shneider, I. G. - 535
 Shpaizman, L. B. - 477
 Shpanov, N. V. - 678
 Shpentser, V. B. - 1102
 Shtangel, L. G. - 19
 Shtepa, N. I. - 58
 Shterenlikht, L. M. - 985

Shtyrenkov, E. V. - 1027
 Shubin, V. V. - 477, 568, 900
 Shul'gat, G. A. - 797
 Shul'gin, G. V. - 913
 Shul'man, G. M. - 640
 Shumovskii, N. I. - 836
 Shurshakov, A. N. - 1085
 Shvartsburd, B. I. - 312
 Sidorkina, Yu. S. - 700
 Sidrov, A. I. - 596
 Silaeva, A. S. - 610
 Sil'man, M. A. - 862
 Siluyanov, V. A. - 535
 Sinitsyn, A. I. - 506, 583
 Siroko, S. M. - 323
 Sitnichenko, V. M. - 388
 Sitnikov, V. E. - 691
 Skachkov, V. V. - 1069
 Skobel'tsyn, Yu. A. - 575
 Skoptsov, V. Ya. - 382
 Skvortsov, V. I. - 1049
 Skvortsova, V. N. - 1037
 Slepak, E. S. - 905
 Slepodyaev, Yu. I. - 178
 Slobodchikova, R. I. - 345
 Smertyak, Yu. L. - 719
 Smirnov, G. G. - 452
 Smirnov, G. I. - 1035
 Smirnov, N. A. - 449
 Smirnov, N. S. - 168
 Smirnov, Yu. I. - 727, 772, 975
 Smol'skii, K. V. - 1057
 Smorodin, M. V. - 397
 Sokolov, V. G. - 1001
 Sokolov, V. I. - 979
 Solodkii, V. V. - 583
 Solopenkov, K. N. - 599
 Sorokin, V. K. - 475
 Sorokin, Yu. L. - 19
 Sorokin, Yu. M. - 1116
 Sosnovskii, L. A. - 58, 403, 817, 1087
 Spivak, L. R. - 186
 Stameikina, L. A. - 1035
 Steklov, O. I. - 794
 Stepanov, A. P. - 386
 Stepanov, B. V. - 1019
 Stepanov, R. D. - 317
 Storchai, E. I. - 252
 Strotskii, V. N. - 836
 Subbotovskii, V. P. - 703
 Sukhanov, A. I. - 611
 Sukhomlinov, I. Ya. - 483
 Sukhorukov, A. N. - 1047
 Sukhov, V. G. - 201
 Suprunov, V. A. - 471
 Suschenko, V. F. - 594
 Sutovskii, P. M. - 575

Suvorin, V. Ya. - 273
 Svidenyuk, I. B. - 64
 Svistunov, Yu. N. - 397
 Svitka, N. I. - 786
 Sychev, A. A. - 52
 Sychev, V. M. - 1001

T

Tal'vinskii, V. I. - 349
 Tapkhaev, V. A. - 35
 Tashchina, A. G. - 43
 Tatarinova, L. V. - 145
 Tat'yanchenko, B. Ya. - 138
 Temirov, Kh. A. - 990
 Temkin, V. M. - 56
 Tenebaum, S. S. - 575
 Tennova, O. M. - 624
 Teplitskii, Ya. S. - 35
 Tereshchenkov, V. V. - 141
 Terpunov, V. A. - 457
 Tikhonov, V. P. - 343
 Timofeev, V. I. - 457
 Timokhina, R. Ya. - 83
 Tityshin, E. A. - 890
 Tkachenko, K. P. - 421
 Tkachukov, L. V. - 492
 Tokarev, Yu. G. - 352, 1011
 Tolstov, B. M. - 96
 Tomilov, F. Kh. - 400
 Torocheshnikov, N. S. - 596
 Trofimov, V. S. - 281
 Trukhin, B. V. - 579
 Trunov, P. G. - 201
 Trusov, N. N. - 267
 Tsipenyuk, M. M. - 548
 Tsirlin, B. L. - 483
 Tsvetkova, M. V. - 71
 Tsvik, L. B. - 868
 Tsybin, N. P. - 27
 Tsybul'nik, A. P. - 982
 Tulaev, V. I. - 551
 Tumanov, A. I. - 359
 Turitsina, A. P. - 838
 Turkin, Yu. A. - 374
 Turovskii, A. P. - 229, 509
 Tyabin, N. V. - 519
 Tyugaev, P. F. - 691
 Tyugin, V. G. - 960

U

Udovitskii, V. I. - 637
 Uklistyi, A. E. - 519
 Usankin, N. G. - 908
 Usanov, V. V. - 510, 996
 Usenko, V. G. - 1052
 Ushakevich, M. M. - 207
 Ushakov, V. G. - 210, 629

Usmanov, Kh. N. - 1118
Ustinskii, N. I. - 854
Uzin, S. V. - 19

V

Vachagin, K. D. - 606
Vachagin, L. D. - 521
Vainshtein, G. E. - 329
Vakhitov, Z. Sh. - 548
Vakhrameev, B. A. - 393
Valiev, I. S. - 1061
Valieva, R. A. - 898
Valiev, Yu. V. - 468
Vansovich, A. V. - 241
Varnakov, S. V. - 408
Vasil'ev, A. M. - 3
Vasil'ev, A. V. - 426
Vasil'ev, K. V. - 345
Vasil'ev, R. A. - 457
Vasil'ev, V. N. - 186
Vasil'eva, I. K. - 148
Vasil'tsov, E. A. - 210, 629
Veremei, L. G. - 646
Vikhman, A. G. - 232
Vikhman, Yu. L. - 31
Vinnikov, A. I. - 689
Vinokur, Yu. G. - 890
Vishnev, I. P. - 890
Vitvinin, A. M. - 215, 731

Vlasov, V. V. - 325
Vodyanik, V. I. - 655
Volgin, B. P. - 513
Volkonskii, V. A. - 543
Volynchik, A. Z. - 823
Vorob'ev, Yu. V. - 114
Voronin, V. I. - 769
Voronina, L. M. - 610
Voronkov, B. D. - 634
Vyatkin, I. A. - 823
Vylegzhanin, G. A. - 916

Y

Yagodin, V. M. - 43
Yakovlev, V. A. - 1087, 1114
Yalyshev, R. G. - 271
Yankin, E. I. - 1006
Yaremenko, O. V. - 1107
Yaroshevskaya, L. A. - 718
Yasnogorodskii, A. Ya. - 27, 117
Yudochkin, S. I. - 599
Yunusov, F. S. - 155
Yurchik, L. M. - 886

Z

Zadov, V. A. - 449
Zagotov, F. G. - 551

Zaitsev, V. A. - 16, 776
Zaitseva, L. V. - 337
Zakharchenko, L. A. - 1061
Zarkh, I. S. - 653
Zarutskii, V. N. - 741
Zaslavskii, A. Ya. - 551
Zats, B. S. - 663
Zaval'nyi, A. N. - 184
Zeinalov, R. R. - 73
Zemtsova, V. N. - 92
Zemzerov, A. I. - 91, 1117
Zharov, A. A. - 996
Zhdanov, V. D. - 616, 1091
Zheltova, G. A. - 1091
Zhiburtovich, G. G. - 969
Zhigulin, V. V. - 575
Zhitomirskii, M. B. - 908
Zholus, S. N. - 789
Zhukov, V. A. - 451
Zhunev, P. A. - 627
Zhuravleva, L. B. - 794
Zhurilo, Yu. V. - 594
Zibert, G. K. - 382
Zil'berg, M. A. - 646
Zinchenko, R. G. - 337
Zinkevich, V. V. - 472
Zotov, B. G. - 16
Zubarenkov, E. I. - 838
Zvezdin, A. G. - 27, 117

TABLES OF CONTENTS

CHEMICAL AND PETROLEUM ENGINEERING

Volume 12, Numbers 1-12, 1976

(A translation of Khimicheskoe i Neftyanoe Mashinostroyeniye)

VOLUME 12, NUMBER 1, JANUARY, 1976

Engl./Russ.

Greetings to the 25th Congress of the Communist Party of the Soviet Union - A. M. Vasil'ev	3	1
THE FOREMAN'S ROLE IN INDUSTRY		
Petrov Volgograd Petroleum Engineering Plant - G. A. Sal'nikov	8	4
The "Tyazhpromarmatura" Production Association - F. F. Dubinchuk	10	5
Working Experience of the Foremen's Council of the Urals Chemical-Machinery Construction Plant - P. M. Lysko	12	6
Work of Senior Foreman Comrade P. A. Romanov in Communist Training of Workers - V. M. Bogachev	15	7
NEW MACHINERY AND EQUIPMENT		
A High-Speed Ammoniator for the Manufacture of Ammonium Phosphates and Complex Fertilizers - Yu. I. Kipriyanov, B. G. Zotov, and V. A. Zaitsev ..	16	8
DESIGN AND CONSTRUCTION OF MACHINERY AND EQUIPMENT		
Design of Gas-Liquid Separators for Gas-Separation Plants - L. N. Demidova, Yu. L. Sorokin, L. G. Shtangei, V. V. Nikiforova, S. V. Uzin, and A. A. Lashchinskii.	19	10
Calculation of the Strength of the Internal Tightening Threaded Rings of the Rotors of Separators - B. F. Gusakov and V. A. Balandin.	23	12
Approximate Calculation of Power Consumed by Twin-Screw Mixers in Processing Highly Viscous Materials - E. F. Bushukhin, Yu. P. Kulagin, K. A. Moseichuk, N. P. Tsybin, A. G. Zvezdin, and A. Ya. Yasnogorodskii ...	27	13
The Axial Rigidity of the Flexible Elements of Compensators with U- and Ω -Shaped Profiles of the Waves - Yu. I. Berliner and Yu. L. Vikhman ...	31	15
INVESTIGATION AND CALCULATION OF THERMOPHYSICAL PROCESSES		
Investigation of Jet Apparatus Operation in Ammonia Synthesis Plants - O. S. Chekhov, Ya. S. Teplitskii, V. A. Tapkhaev, and V. S. Kobzev.	35	17
Calculating Parameters of Polymer Film Axial Orientation on Roller Machines - V. G. Semenov, S. I. Gdalin, and G. V. Sagalaev.	38	18
Outlook for Using Mixture Throttling Cycles in Cryogenic Systems - V. M. Brodyanskii, V. M. Yagodin, V. A. Nikol'skii, and A. G. Tashchina ...	43	21
Investigation of the Total Energy (Heat and Power) Performance of Finned Tube Bundles in Crossflow of Air - V. B. Kuntyshev, V. P. Gladynets, A. E. Piiir, and and F. M. Iokhvedov	47	23
NEW MATERIALS AND CORROSION CONTROL		
Corrosion Resistance of Ni and Fe-Ni Alloys in Production of Acrylates - G. V. Klimova and M. M. Kristal'	50	25
Corrosion Resistance of Nickel and Nickel Weldments in Fused Alkali - N. I. Kamakin, A. A. Sychev, I. N. Medrish, V. R. Savochkin, and T. V. Babenko.	52	25

EQUIPMENT MANUFACTURING TECHNOLOGY

Effect of Treatment of Electrode Wires before Welding on the Porosity of Welding Seams - G. N. Bakakin, B. A. Podol'skii, L. N. Balan, and V. M. Temkin	56	28
Casting Compressor Cylinders for a GPA-5000 Gas-Transfer Unit Using High-Strength Cast Iron - N. B. Pokrovskaya, L. A. Sosnovskii, P. Ya. Belikov, V. I. Gorzii, G. G. Shipunov, V. I. Konoplenko, V. N. Ovcharenko, B. I. Ogurtsov, and N. I. Shtepa	58	29
Calculating the Allowance for the Finishing Treatment of Crankshaft Journals of Opposite Compressors - V. N. Ovcharenko and A. V. Grishkevich	61	31
Protection of the Inner Surfaces of Open Vessels with Pentaplast - V. N. Nadiktov, P. A. Omel'chenko, I. B. Svidenyuk, N. D. Kuhar', and S. V. Pedriiko.	64	32

NORMALIZATION AND STANDARDIZATION

New Standard for Hot-Rolled Two-Layer Corrosion-Resistant Steel - A. A. Bykov and A. M. Logvinova	66	33
--	----	----

ORGANIZATION AND ECONOMICS OF PRODUCTION

Organization of a Pilot Program for a Preliminary Recording of Interdepartmental Cooperation in Plants - A. P. Chernov	67	34
Analysis and Forecasting of Work Productivity - M. I. Belkin, Yu. I. Shchepotkin, L. M. Rodina, and M. V. Tsvetkova	71	35

QUALITY, RELIABILITY, AND SERVICE LIFE

Investigation of the Effect of Tightness on the Reliability of the Fastening of the Teeth in the Body of the Cutters of Shaft-Type Drilling Bits - R. R. Zeinalov and A. I. Garaev	73	36
The Wear of Metallic Pairs in Salt Solutions of Various Concentrations - O. K. Angelopulo, V. F. Pichugin, and E. A. Petrosyants	74	37

EXCHANGE OF EXPERIENCE

Unit for Assembling Vanes of Axial Pump Impellers - G. I. Mironov and M. I. Saparkin ..	77	38
A Machine for Cutting Tubing - K. N. Kryuchkov	79	39
A Device for Assembling and Welding the Wedges of Gate Valves - S. N. Maslennikov	81	40
Three-Cutter Head with a Lunette for Machining Flexible Stepped Shafts - I. A. Motoshkov and V. I. Motoshkov	82	41

INFORMATION

Results of the All-Union Competition - R. Ya. Timokhina	83	41
Batcher for Bulk Materials Prone to Adhesion - M. G. Goncharov, B. S. Modestov, Yu. V. Minaev, and N. I. Levshenko	86	42
Cable Heaters for Pilot-Plant Apparatus - N. D. Avivo, G. I. Obushenkov, V. V. Kupriyanov, V. I. Burov	88	43
Cut-Off Valves for Liquid Hydrogen under High Pressure - Yu. K. Kuz'min, M. M. Grinblat, and A. I. Zemzerov	91	45
Investigation of the Interaction between the Parameters of a VP-20/8 Compressor Unit by the Methods of Correlation Analysis with Optimization of the Volume of Controlled Parameters - A. N. Artobolevskii, É. V. Dubrovskii, and V. N. Zemtsova	92	45

FOREIGN TECHNOLOGY

Methods and Equipment for Measuring and Preparing the Edges of Spherical Storage Tank Components (Survey of Foreign Patents) - B. M. Tolstov	96	47
---	----	----

VOLUME 12, NUMBER 2, FEBRUARY, 1976

A Fitting Greeting to the 25th Congress of the CPSU.....	103	1
NEW MACHINERY AND EQUIPMENT		
FGSh-401K-4 Filtering Worm Centrifuge for the Production of Fruit and Vegetable Juices — A. E. Kuzyakov, V. P. Kuleba, and G. M. Krasnopol'skii	106	3
Crusher for Mold Fungus Cultures — A. V. Bel'tyukov.....	108	3
CONSTRUCTION AND DESIGN OF MACHINES AND APPARATUS		
Calculation of Multilayer High-Pressure Vessels for Limiting Loads — G. D. Del' and V. V. Ivantsov	110	4
Design and Calculation of a Cam — Lever Mechanism for the Displacement of the Crossarm of a Former — Recharger — Yu. V. Vorob'ev, A. D. Kovergin, O. E. Nadzharov, and V. L. Legostaev.....	114	6
Simplified Calculation of the Profile of Endless Screws with a Gapless Linkage — K. A. Mosiichuk, A. Ya. Yasnogorodskii, and A. G. Zvezdin	117	7
The Characteristics of Air Turbine Cooling Machines with an Improved Hydraulic Circuit — M. G. Dubinskii, E. S. Gurevich, M. G. Drui, V. P. Gavrikov, and V. A. Ryadov	119	8
Application of Dimensional Analysis to Evaluate the Assemblability of Turbocompressors for Turbocooling Machines — K. G. Antosevich and V. M. Borisov.....		11
INVESTIGATION AND CALCULATION OF THERMOPHYSICAL PROCESSES		
Calculating Moisture Content in Dewatering Cake Using a Compression Roller — F. M. Pospelov	128	12
Investigation of Heat Transfer from a Gas Stream in the Fluid-Flow Channel of a Corrugated Plate Spiral Heat Exchanger — V. Ya. Gal'tsov and V. M. Korotaev..	131	14
Liquid Pressure and Peripheral Velocity Distribution Developed by a Turbine (Blade) Agitator — A. I. Mil'chenko, S. G. Shchur, M. F. Mikhalev, E. M. Dem'yanova, and I. A. Shchuplyak	133	15
Investigating the Operation of a Vortex Liquid Distributor — B. G. Kholin, B. Ya. Tat'yanchenko, and L. G. Kirnyi	138	17
Calculations for Single-Stage Fluidized-Bed Equipment for Cooling Mineral Fertilizers — G. V. Kryukov, V. V. Tereshchenkov, M. V. Lykov, and O. V. Gabeskiriya..	141	19
NEW MATERIALS AND CORROSION CONTROL		
Chemical Stability of Thermoplastics under Stress — A. V. Goryainova, I. S. Rebenkova, and L. V. Tatarinova	145	21
Materials of Construction for Plate Heat Exchangers in Soda Ash Production — V. Yu. Babkina, I. K. Vasil'eva, O. V. Gapunina, and E. G. Chub	148	23
EQUIPMENT MANUFACTURING TECHNOLOGY		
Application of Diffusion Welding for Cladding Separator Rotors — V. F. Dorofeev.....	150	24
Investigation of Thermal Fatigue of Nickel-Based-Electrode Welded Joints of Heterogeneous Steels — N. M. Korolev	152	25
Grinding the Reinforcement of Weld Joints in Shells — F. S. Yunusov, Yu. Ya. Fel'dman, V. A. Grachev, and A. F. Chamin	155	26
Forming Pipe Parts by Hydrostatic Pressure — V. P. Luk'yanov, V. P. Shateev, V. V. Klochkov, and L. V. Obrushnikov	160	29
QUALITY, RELIABILITY, AND LIFETIME		
Level of Freedom from Breakdown in Pumps for Liquefied Gases — B. G. Blyukher, V. A. Kotlyar, and E. A. Kudryashov	163	31
Selection and Pretreatment of Metal for Glass Lining — V. M. Mizonov, N. S. Smirnov, and P. S. Shkolyar	168	33

EXCHANGE OF EXPERIENCE

Marking of Column Shells by Means of an Optical Method for the Fitting of Plates — Yu. A. Feduleev and E. I. Kiselev	172	35
The Use of VT1-0 Titanium for Producing Galvanizing Equipment — P. A. Shkola	175	36
A Die for Producing Bends — O. A. Dmitriev	177	37
Stamp for Manufacturing Sections of Plates for Column Units — Yu. I. Slepndyaev	178	38

INFORMATION

Production of New Equipment	180	39
Newly Designed Gravity Blender — B. S. Krotov, I. I. Bagrintsev, A. N. Zaval'nyi, and S. A. Rebenko	184	41
Reinforced-Concrete Supporting Constructions for Aggregates of Pump and Compressor Equipment — M. I. Brailovskii, L. R. Spivak, and V. N. Vasil'ev ..	186	42
Increasing the Accuracy of the Measurement of the Capacity of Volumetric Pumps — I. I. Karasik, G. A. Gukasyan, and A. M. Dobryanskii	189	43
OV6-38 × 2 MBK Electric Pump Aggregate — A. D. Dugach	192	45

FOREIGN TECHNOLOGY

Relieving Compensators for Pipelines — V. L. Frid	194	46
---	-----	----

BOOK REVIEWS

A. V. Barenboim — "Low-Flow Freon Turbine Compressors" — Reviewed by F. S. Rekstin and A. A. Dimentova	198	48
---	-----	----

VOLUME 12, NUMBER 3, MARCH, 1976

NEW MACHINERY AND EQUIPMENT

A Filter-Clarifier for Separating a Sulfuric Acid Suspension — P. G. Trunov, V. G. Sukhov, and M. D. Mazo	201	1
Volumetric Filter under Pressure with Discharge of the Cake by a Converging Filter Cloth — G. G. Kotlyarov and A. I. Lapin	205	3
Combination High-Output Emulsion-Vortex Burner for Tubular Heaters — B. I. Liberov and M. M. Ushakevich	207	4

DESIGN AND CONSTRUCTION OF MACHINERY AND EQUIPMENT

Impeller Type Agitators — V. V. Belynskii, E. A. Vasil'tsov, N. S. Kudra, and V. G. Ushakov	210	5
Calculating the Critical Speed of Papermaking Machine Shafts, Considering the Stiffness of Supports and Screens — A. A. Sannikov and A. M. Vitvinin	215	8
A Study of the Ring Packing of a Centrifugal Pump — L. E. Chegurko and V. E. Chegurko	218	10
A Means of Determining Gas Leaks through the Piston Rings of a Compressor Cylinder — I. E. Rozenshtein and V. S. Dibner	220	11
Calculation of Lens Compensators Operating in the Elastoplastic Region — M. V. Gokun.	224	13

INVESTIGATION AND CALCULATION OF THERMOPHYSICAL PROCESSES

Maximum Loadings of "No-Volume" Centrifugal Separators — A. P. Turovskii and É. D. Malyutina	229	16
Investigating the Effect on Downcomer Width on Crossflow Mass-Transfer Tray Operation — A. G. Vikhman, M. A. Berkovskii, and S. A. Kruglov	232	17
Design of Hydrocyclones for Clarifying Cellulose Feedstocks — A. V. Reusov, Yu. V. Sharikov, L. A. Reusova, and M. G. Akopov	235	19
Determining the Main Hydrodynamic Features of Vortex Liquid Flow in a Vessel with a Radial-Vane Agitator — I. M. Muslaev, I. N. Karasev, and G. G. Mikhailov	238	20
Comparing Heat-Exchange Surfaces by Their Dimensions — O. K. Krasnikova, V. G. Pron'ko, I. P. Isyukin, S. L. Serova, and A. V. Vansovich	241	21

NEW MATERIALS AND ANTICORROSION PROTECTION

Corrosion Resistance of Titanium in Sodium Chloride Brine and a Mercuric Chloride

Electrolysis Anolyte — V. A. Levin, N. B. Kalinicheva, and L. P. Chernykh . . . 245 24

Corrosion Resistance of Glass Ceramic Enamel — T. A. Dmitrienko . . . 250 27

EQUIPMENT MANUFACTURING TECHNOLOGY

Optimization of the Flux Bath Brazing Process for Aluminium Parts

— E. I. Storchai and N. S. Baranov . . . 252 28

Investment Casting of Inserts Used in Dies — V. A. Ezhov, D. A. Ermoshin,

and Yu. P. Gorlov . . . 256 30

Particle Temperature in the Gas Flame during Powder Fusion Cladding

— V. V. Fedosov . . . 259 31

Ultrasonic Inspection of Gray Cast Iron Structure and Mechanical Properties

— N. V. Khimchenko and V. A. Bobrov . . . 263 33

ORGANIZATION AND ECONOMICS OF PRODUCTION

Optimizing the Makeup of an Intrafactory Transport Pool — Yu. P. Bulatov,

V. V. Filippov, and N. N. Trusov . . . 267 35

QUALITY, RELIABILITY, AND SERVICE LIFE

Increasing the Wear Resistance of Plunger Pump Parts — Yu. A. Evdokimov,

R. G. Yalyshev, and O. I. Meleshko . . . 271 38

Criteria for Evaluating the Effect of Hydrogen on Steel Properties under Complex

Stress Conditions — V. Ya. Suvorin . . . 273 39

EXCHANGE OF EXPERIENCE

Technology of Making Sealing Rings and Packing Rings of Rubber

— V. I. Neprin . . . 277 41

Boring of Openings in Housing Parts on Universal Lathes — L. A. Fomin . . . 279 42

Device for Loading Apparatus Weighing More Than 80 Tons on Railroad Flatcars

— V. S. Trofimov . . . 281 43

Four-Cutter Whirling Head — V. V. Bush and L. V. Guseva . . . 283 43

INFORMATION

Equipment Manufacturing Technology . . . 284 44

Piston Seal of New Design — V. P. Belugin, S. E. Krakopol'skii, and Yu. M. Rudoi . . . 286 45

Combined Rubber — Teflon Diaphragms, O. I. Orekhov and V. S. Evdokimova . . . 287 45

Pressure Indicator — B. V. Mishnin and R. Kh. Salakhiev . . . 289 46

Improved Transfer Device for Helium Liquefiers — G. A. Maslak . . . 291 47

VOLUME 12, NUMBER 4, APRIL, 1973

The Resolutions of the 25th Congress will be Fulfilled . . . 295 1

Improving the Quality of Training of Young Specialists is an Important Task in the Tenth

Five-Year Plan — N. I. Basov . . . 300 4

NEW MACHINERY AND EQUIPMENT

New Steam (Reciprocating) Pumps for Chemical Products — A. M. Podlesnyi . . . 304 5

New Equipment for Size Separation of Granular Materials Such as Ion-Exchange Resins

— B. A. Esin . . . 307 7

DESIGN AND CONSTRUCTION OF MACHINERY AND EQUIPMENT

Preliminary Selection of Optimum Centrifuge Type — V. A. Drigo, A. A. Nesterovich,

and D. E. Shkoropad . . . 309 8

Design Method for Calculating Tolerances in the Production of Centrifugal Pumps

— V. I. Golubev and B. I. Shvartsburd . . . 312 10

Effect of Liquid Diffusion on Stressed State of Polymeric Materials — R. D. Stepanov,

A. P. Leonov, and A. E. Lyalin . . . 317 12

Selection of Magnitude of Tolerable Plastic Deformation of Thick-Walled Tubes Loaded with an Internal Pressure — E. Ya. Neiman and N. P. Rezakova	320	14
INVESTIGATION AND CALCULATION OF THERMOPHYSICAL PROCESSES		
Drying of Pigments under Nozzle-Blowing Conditions — B. D. Matveev and S. M. Siroko.	323	15
Investigation of Mass Transfer in Injection Apparatus — B. N. Basargin, N. I. Gel'perin, V. I. Katalov, and V. V. Vlasov.	325	16
Optimization of Zeolite Subunits for Purifying the Air of Air-Fractionating Units — V. M. Braun, G. E. Vainshtein, V. L. Mel'tser, and V. K. Rybin	329	18
Study of the Limestone Calcination Regimes in Spouted-Bed Kilns — A. V. Golubkovich	332	19
NEW MATERIALS AND CORROSION CONTROL		
Increasing the Corrosion Resistance of Aluminum and Alloys of the Aluminum — Magnesium Type — L. V. Zaitseva, É. K. Malakhova, and R. G. Zinchenko. .	337	22
Paste to Eliminate Corrosion Products from the Surface of Carbon Steels — V. S. Kotsur, V. A. Makarov, Yu. N. Forostyan, and L. S. Lubenets.	340	23
EQUIPMENT MANUFACTURING TECHNOLOGY		
Welding All Metal Phosphoric Acid Extractors of 03Kh21N21M4GB Steel — A. N. Perfil'ev, L. P. Kolosova, V. A. Rumyantsev, and V. P. Tikhonov. .	343	24
Optimizing the Geometric Parameters of a Plasma Arc Cut — N. I. Nikiforov, K. V. Vasil'ev, E. V. Govorin, and R. I. Slobodchikova	345	26
Forming Elliptical Bottoms with a Variable Clamping Force — V. P. Luk'yanov, E. D. Gorokhov, L. V. Obrushnikov, and V. I. Tal'vinskii	349	28
Effect of Various Factors on the Mechanical Properties of Welded Joints of Alloy AMg5 — Yu. G. Tokarev and Yu. I. Kozlov	352	29
ORGANIZATION AND ECONOMICS OF PRODUCTION		
Increasing the Efficiency of the Maintenance Industry — V. I. Shironin.	355	30
Technique for Determining the Economics of Regenerative Heat Exchanger Packings — A. A. Dmitrienko, N. A. Khomutov, and A. I. Tumanov	359	32
QUALITY, RELIABILITY, AND SERVICE LIFE		
Investigation and Evaluation of Operating Reliability of Opposed Compressors on an M10 Base — N. I. Arslanov, A. G. Kats, and I. D. Kramer	362	34
Investigation of Friction in the Seal of the Piston of a Drilling Pump — V. P. Belugin, Ya. S. Mkrtychan, and A. A. Petrosyants.	367	36
EXCHANGE OF EXPERIENCE		
Mechanized Unit with Aerostatic Bearings for Balancing Heavy Pump Wheels with a Straight Rear Wall — B. P. Mishin and A. N. Gafurova.	372	39
Semiautomatic Machines for Plasma Arc Cutting — Yu. A. Turkin, G. G. Éskin, and V. I. Sedov.	374	40
Universal Stamp for Perforating Sheets — N. M. Akhmetzyanov	376	41
Plastic Plug — M. A. Sagratyan	378	42
INFORMATION		
Investigations of the Friction Couples of Mechanical Seals — A. V. Artamonov	379	42
Automating the Operation (Opening/Closing) of Coking Drum Hatches — I. K. Glushko, G. K. Zibert, A. E. Akab, V. E. Gonchar, and V. Ya. Skoptsov	382	43
NEW BOOKS OF THE "TECHNICAL CYBERNETICS" ENGINEERING MONOGRAPH SERIES		
Components and Elements of an Automatic Control System. Part I. Measuring Components and Transducers	385	45
Components and Elements of an Automatic Control System. Part 2. Amplifiers, Bias Elements and Components	385	45
Components and Elements of an Automatic Control System. Part 3. Actuators and Servomechanisms	385	45

Rupture Disks — A. P. Stepanov	386	46
Oxygen Gas Analyzer — L. A. Boreimagorskaya and V. M. Sitnichenko	388	47

VOLUME 12, NUMBER 5, MAY, 1976

NEW MACHINERY AND EQUIPMENT

New Machinery Manufactured by "Uralgidromash" — B. A. Vakhrameev	393	1
SS-320 High-Speed Mixer for Powdered Materials — V. A. Krivokon' and S. D. Manivchuk	395	2
Closing Device of a Valve for Media Containing Solid Particles — Yu. K. Garbuzov, O. V. Kuznetsova, Yu. N. Svistunov, and M. V. Smorodin ..	397	3

CONSTRUCTION AND DESIGN OF MACHINES AND EQUIPMENT

Stress Distribution of Multilayer Wound Vessels Strained at Normal and Elevated Temperatures — F. Kh. Tomilov, E. G. Borsuk, and S. P. Popov	400	4
Calculational-Experimental Evaluation of the Fatigue Resistance of the Crankshafts of Opposing Compressors — L. A. Sosnovskii and I. V. Kudryavtsev	403	6
Investigations of the Sealing of Detachable Connections of Vacuum Systems — S. N. Filatov, A. D. Domashnev, and S. V. Varnakov	408	10
Determining the Characteristics of High-Pressure Pumps for Cryogenic Liquids — V. I. Lyashkov	412	11

INVESTIGATION AND CALCULATION OF THERMOPHYSICAL PROCESSES

Investigations of the Relations Between the Filtration Constant of Low-Concentration Sus- pensions and Filtration Pressure and Solid-Phase Concentration — G. G. Kotlyarov Investigation of Carryover in a Column with Trays of the Downcomer Type, Having a Large Free Cross Section — Zh. A. Koval', I. K. Shmul'yan, A. V. Bepalov, and O. G. Kuleshov	416	13
Calculation of the Principal Parameters of the Separation Space of Vacuum Evaporators and Crystallizers — V. G. Ponomarenko, Yu. A. Kurlyand, S. N. Belomytsev, and K. P. Tkachenko	421	16
Investigation of the Temperature Fields in the Cylinder of a Screw Press with Water Cooling — B. L. Ositinskii and V. P. Basko	423	18
The Form of the Jet with the Dispersion of a Liquid by Centrifugal Rotors with Blades — A. V. Vasil'ev, F. A. Gulyaev, and A. N. Marchenko	426	19

NEW MATERIALS AND CORROSION CONTROL

Mechanism of the Intergranular Corrosion of Cast Nickel—Chromium—Molybdenum Alloy — V. Z. Lev	429	21
Corrosion Resistance of Materials Under the Production Conditions for Highly Basic Anion Exchangers — L. S. Makarova, A. M. Gleikh, G. I. Gerasimenko, V. A. Grigor'ev, and A. S. Anfimova	431	22

EQUIPMENT MANUFACTURING TECHNOLOGY

Development of Manually Operated Air-Cooled Plasma Cutting Machines with Air Stabilization of the Arc — A. M. Komissarov and A. A. Isachenko	436	25
Finish Machining of Stainless Steel and Titanium Alloy Parts by Cold Plastic Deformation Techniques — V. A. Gorokhov	439	27
Investigation of the Efficiency of Milling with the Regeneration of Damaged Articles, Using the Method of a Multifactor, Planned Experiment — S. G. Babaev, A. P. Gasanov, and V. A. Ali-Zade	442	28
Methods for Increasing the Operating Properties of Worm-Screw Machines for Processing Plastics — M. I. Leshchenko	446	31
Electrocontact Deposition of Wear-Resistant Coatings — V. A. Zadov, N. A. Smirnov, E. M. Cheremisinov, and V. N. Batrakov	449	32

NORMALIZATION AND STANDARDIZATION

New State Standard for FPAKM Automatic Box Filterpresses — G. M. Kochkin and N. S. Lebedeva	450 33
Standardization of Technological Processes in the Fittings-Construction Subbranch — V. A. Zhukov	451 33
Norms for Safety Techniques for Worm-Screw Machines for the Extrusion and Drying of Rubber — A. V. Efimov and G. G. Smirnov	452 34

QUALITY, RELIABILITY, AND DURABILITY

Increasing the Reliability of Welded Petrochemical and Gas Equipment — L. S. Glikman, V. G. D'yakov, Yu. S. Medvedev, and Yu. I. Rubenchik	453 34
Prolonging the Life of Pistons for Acid Pump Aggregates — S. N. Levitskii, V. I. Timofeev, V. I. Razzhivin, V. A. Terpunov, L. I. Gotlib, and R. A. Vasil'ev	457 37
The Effect of Fuel Gas on the Quality of Lead Cladding — N. I. Kamakin, V. V. Gavrikov, and É. E. Braker	460 39

EXCHANGE OF EXPERIENCE

Improvements in Foundry Molding Technology — D. Ya. Ligun	465 41
Assembly Fixture for Welding Blades of Pump Impellers — V. P. Saburov	467 42
Gage for Checking the Location of Slots Relative to the Thread Axis — Yu. V. Valuev ..	468 43

INFORMATION

The Terminology of Low-Temperature Technology (Discussion) — A. V. Martynov ...	470 44
Hydrocyclones for the Cleaning of Pump Sealing Water — N. I. Glagolev, Ya. Kh. Prilutskii, V. Yu. Lipmanovich, and V. V. Zinkevich	472 45
Neon Liquefier — B. P. Batrakov and V. A. Kravchenko	474 46
Filtering Plates of Porous Titanium Sheets — V. K. Sorokin	475 46
Resistance of Certain Types of Rubbers and Semi-Ebonites in Solutions of Acids — V. V. Shubin, L. B. Shpaizman, and E. G. Kogan	477 48

VOLUME 12, NUMBER 6, JUNE, 1976

NEW MACHINES AND APPARATUS

Comparative Analysis of the Efficiency of Heat-Using Refrigerating Machines — I. M. Kalnin', B. L. Tsirlin, I. Ya. Sukhomlinov, N. G. Shmullov, and F. M. Chistyakov	483 1
DPNS-220/100 Diesel Pump — E. S. Filippov, V. V. Burenin, and A. Ya. Novikov	488 4

CONSTRUCTION AND DESIGN OF MACHINES AND APPARATUS

Aerodynamic Investigations of the Intake Pipe of an Air Turbine-Type Refrigeration Machine MTKhM1-25 — L. V. Tkachukov, A. P. Pivovarov, and S. L. Kosmatov	492 5
Strength Calculation of the Shafts of Multistage Radial-Blade Mixers — I. N. Karasev	496 7
Investigations of the Low-Cycle Fatigue of Type 09Kh15N8Yu Steel — V. P. Balkov, V. G. Mal'tsev, and V. I. Mironov	501 10
Calculation of Structural Parameters of Hydrocyclones — Yu. I. Karpinskii	504 11
An Automatic Control System for a Gas-Transfer Unit — A. I. Sinitsyn and V. N. Pulin	506 12

INVESTIGATION AND DESIGN OF THERMOPHYSICAL PROCESSES

Rotary Equipment for Separating Liquid Droplets from a Gas Stream — A. P. Turkovskii and R. B. Bikhman	509 13
--	--------

Reduced Characteristics of Ejectors - A. N. Sherstyuk, V. V. Usanov, and T. M. Rozenoer	510 14
Recovery of a Highly Disperse Aerosol in Turbulent-Bubbling Equipment - V. S. Chufarovskii, V. M. Kostin, B. P. Volgin, and V. F. Fedorenko	513 15
Heat Removal from the Casing of the Stator of the Electric Motors of Sealed Electrical Pumps in the Presence of an Axial Flow of Water in the Annular Gap between the Stator and the Rotor - S. S. Gerasimenko, G. I. Gruzintsev, P. D. Kostov, A. A. Mosyak, and B. G. Rykova	516 17
Spreading of a Non-Newtonian Liquid over the Surface of Centrifugal Atomizers - A. E. Uklistyi, N. V. Tyabin, G. V. Ryabchuk, and G. I. Lepekhn	519 19
Determination of the Effective Viscosity of a Bulk Material in a Flexible Screw Conveyor - S. N. Mikhailov, L. D. Vachagin, P. A. Preobrazhenskii, M. V. Mikhailova, and M. L. Fridman	521 20
NEW MATERIALS AND ANTICORROSION MEASURES	
A New Material PAM-50 for Making Guide Bushings for Cryogenic Equipment - A. P. Makushkin, T. S. Shcherbakova, M. P. Shebeko, Yu. F. Kulikov, I. I. Putsev, and O. D. Sellevskii	523 21
The Corrosion of 12Kh18N10T Steel in Nitrophosphate Solutions - V. A. Bodnya, G. I. Agapov, and Yu. M. Razvadovskii.	526 23
Sensitivity of Magnetographic Inspection of Weld Joints and Prospects of Its Use in Chemical-Machinery Construction - N. N. Kurtashkin and E. N. Polyakov.	528 24
Ultrasonic Inspection of Corner and the Weld Joints - F. N. Pyshehev and E. B. Petrovskii.	530 25
Method of Obtaining a Coating of Uniform Thickness on a Rotating Spherical Base Layer in Vacuum - F. D. Putilovskii, V. A. Siluyanov, and I. G. Shneider	535 27
Experience in Expansion of Titanium Tubing in Tube Sheets of 12Kh18N10T Steel - V. I. Leverash, V. G. Shmelev, and G. V. Medvedev	538 29
Effect of Surface Roughness of Chromium-Nickel Steels on on Carburization Resistance - N. M. Levtonova, Kh. I. Cheskis, and A. F. Mikhailova	540 30
ORGANIZATION AND ECONOMICS OF PRODUCTION	
Improving the Formulation of Prices for Petroleum Apparatus (in the Form of a Discussion) - M. I. Belkin, V. A. Volkonskii, and V. V. Plyshevskii	543 31
Providing Pump-Building Plants with Parts of Interindustry Use Including Cast Blanks and Fastening Parts - E. M. Karlik, G. K. Kamalov, M. M. Tsipenyuk, and Z. Sh. Vakhitov	548 34
QUALITY, RELIABILITY, AND SERVICE LIFE	
The Use of Type 12Kh18N10TE Increased-Machinability Steel for Producing Screens for Pulp and Paper Equipment - A. Ya. Zaslavskii, Yu. G. Plyusnin, V. A. Rodionov, Z. F. Guseva, V. I. Tulaev, and F. G. Zagitov	551 35
Roughness of Enamelled Surfaces - A. N. Chernyavskii, S. I. Ibakhin, and G. A. Preis	554 38
EXCHANGE OF EXPERIENCE	
The Introduction of Cutters of É1'bor-R into Refrigerator and Compressor Machinery Plants - Yu. G. Glazov and I. G. Nastasyuk	557 39

Mechanized Line for Galvanizing of Large Parts		
- F. G. Mamedov, É. R. Agaverdieva, D. G. Ismailov,		
and Z. M. Étin	559	40
Device for the Assembly of Heat Exchanger Details before Welding		
- E. I. Khait	560	40
INFORMATION		
Manufacture of New Equipment	561	41
Unit for Testing Vessel Closures and Connections for High-Pressure		
Piping - Yu. M. Morozov and V. D. Prodan.	566	43
Use of Types 2572 and 4508 Adhesives for Gluing Different Types		
of Rubbers and Semiebonites - V. V. Shubin and A. S. Bulatov	568	44
Unit for Testing Welded Joints of Pipelines and Vessels		
- V. S. Milanchev and B. F. Korneev.	569	45
Pastes for Removing Oxide Films and Temper Colors from Welded Structures		
- G. A. Nazarova, M. Kh. Freid, and V. A. Suprunov	571	46
Measurement of Leaks of Highly Volatile Liquids in Vacuum		
- V. G. Kusanov, M. A. Alekseeva, and B. Kh. Avrushchenko	573	47
ARTICLES DEPOSITED AT TsINTIkhimneftemash		
Investigation of Inter-crystallite Corrosion in Some Surfacing		
Hard Alloys - R. A. Sataev and S. P. Levitskii	575	48
Investigation of the Fatigue Stress of Welding Seams on Titanium Alloys		
- P. M. Sutovskii and S. S. Tenebaum	575	48
Hydrocyclone for Testing Purposes - Yu. A. Skobel'tsyn,		
L. T. Bolotov, A. F. Komlev, and V. V. Zhigulin	575	48
Investigation of the Rotational Disruption and Pumpage in the Operation		
of a Centrifugal Compressor with Gases with Different Physical		
Characteristics over a Wide Range of Mach Numbers		
- F. S. Rekstin, P. A. Onatskii, and B. A. Al'tgovzen	576	48

VOLUME 12, NUMBER 7, JULY, 1976

DESIGN AND CONSTRUCTION OF MACHINERY AND EQUIPMENT

Stress Concentration in Threaded Connections of Centrifugal Separator Drums		
- V. P. Baokov and B. V. Trukhin	579	1
Automatic Blowdown System for Compressors - A. I. Sinitsyn,		
V. V. Solodkii, and V. N. Pulin	583	3
Structural Synthesis of Assembly Systems in the Tire Industry		
- L. V. Petrokas and Yu. I. Karmatskii	584	4
Calculation of the Torque Needed for Screwing Deep-Well Pump Rod Joints		
- R. S. Khusainov	589	6
INVESTIGATION AND CALCULATION OF THERMOPHYSICAL		
Testing Apparatus for the Evaporation of Sulfuric Acid to High Concentrations		
- Yu. V. Zhurilo, E. M. Kovalev, N. Ya. Danilin, L. P. Pertsev,		
and V. F. Sushchenko.	594	8
Investigation of the Nonstationary Stage in Operation of Air-Drying Units Using		
the Method of Short-Cycle Nonheated Adsorption - V. I. Ermakov,		
M. B. Orlovskaya, A. I. Sidrov, and N. S. Torocheshnikov	596	9
Limiting Thermal Fluxes of Vertical Thermosiphon Evaporators - N. I. Gel'perin,		
K. N. Solopenkov, and S. I. Yudochnik	599	11
Determination of the Constants in the Filtration Equations with Variable		
Deposit Resistance - M. Bolek	602	13
Determination of the Speed of Granular Material Flow in a Two-Spiral Flexible		
Screw Conveyor - S. N. Mikhailov, V. V. Kurmanaevskii, K. D. Vachagin,		
and M. L. Fridman	606	15

NEW MATERIALS AND CORROSION CONTROL

Corrosion of Some Carbon and Alloy Steels in a Mixture of Dehumidified HCl and SO ₂ - Yu. I. Perin, V. A. Dobronravov, L. K. Burmistrova, L. M. Voronina, and A. S. Silaeva.....	610	17
Investigating the Chemical Resistance of a Hornblendite Rock Casting in Acid Media and Molten Chlorides - V. A. Chechulin, V. V. Chunaev, A. I. Novikov, A. I. Sukhanov, and V. M. Karpov.....	611	17

EQUIPMENT PRODUCTION TECHNOLOGY

Effect of the Composition of a Protective Atmosphere on the Chemical Composition, Structure, and Resistance to Intergranular Corrosion of Welding on 12Kh18N10T Steel - V. N. Pozdeev	613	18
The Use of Stampings from 07Kh16N6 Steel for the Production of Separator Rotor Parts - N. I. Moskvina, A. L. Belinskii, and V. D. Zhdanov	616	20
Production of the Mixer of a Hydrolysis Apparatus from 4201 Titanium Alloy - G. M. Shelenkov, V. E. Blashchuk, and L. M. Onoprienko.....	618	21
Determining the Operating Diameters of an Expanding Tool - V. L. Kagan, P. A. Doroshenko, and V. M. Brif.....	620	22

ORGANIZATION AND ECONOMICS OF PRODUCTION

Method for Analytical Calculation of the Operating Cost of a Drum Atmospheric Dryer - V. S. Novitskii, V. V. Gryaznov, A. A. Koryagin, and O. M. Tennova	624	24
Expediency Criterion for Reduction of the Assortment of Pipe Fittings with the Aim to Increase their Output - P. A. Zhunev	627	26
Assessment of the Technical Level of Equipment with Stirring Devices - V. V. Belynskii, E. A. Vasil'tsov, and V. G. Ushakov.....	629	27

QUALITY, RELIABILITY, AND DURABILITY

Increasing the Wear Resistance and Service Life of Screw Presses for Dewatering Synthetic Rubbers - B. D. Voronkov, N. K. Globin, A. F. Guida, and B. I. Lebedev	634	29
Corrosion-Mechanical Wear of Siliconized Steels - V. I. Udovitskii.....	637	31
Luminescent-Hydraulic Method of Testing Chemical and Petroleum Equipment - V. P. Novikov and G. M. Shul'man.....	640	33

EXCHANGE OF EXPERIENCE

Selection of Tool Material for Machining Wear-Resistant Polymer Coatings - V. N. Protasov, Ya. A. Kaminskii, and I. V. Fedorov.....	643	34
Adjustable Fixture with Pneumatic Drive for Diamond Boring of Thin-Walled Liners - S. V. Ryumin.....	644	35
Broach Burnishing of Parts Used in Vacuum Equipment - S. Ya. Abovskii, L. G. Veremei, M. A. Zil'berg, and E. G. Ikhilevich.....	646	35

INFORMATION

In the Scientific and Technical Council of Minkhimash - V. I. Rublev	647	36
Programming Device with High Reliability in Operation - G. G. Larionov and V. G. Shebitchenko	650	38
Solid Gland Seal for the SN Mixer - A. I. Gladchenko.....	652	39
Knife with Loosening Combs for the Removal of Deposits in FGN Centrifuges - V. N. Petrakov, I. S. Zarkh, Yu. I. Perin, and I. D. Gridin.....	653	39
Use of Safety Valves in Conjunction with Rupture Diaphragms - V. I. Vodyanik.....	655	40
Articles Deposited at TsINTIKHIMNEFTEMASH.....	658	42

FOREIGN TECHNOLOGY

Basic Trends in the Design of Seals for Reciprocating Movement (Patent Survey) - V. V. Burenin.....	659	42
--	-----	----

BOOK REVIEWS

Applied Geometry for Chemical Engineering - Reviewed by B. S. Zats and A. S. Semenikhin	663	44
New Books.....	664	45

VOLUME 12, NUMBER 8, AUGUST, 1976

NEW MACHINES AND APPARATUS

High-Pressure Turbine-Driven Gas-Expansion Machine RT-5/200 - A. V. Davydov, B. A. Antipenkov, G. A. Gitsevich, G. A. Perestoronin, and V. D. Shcherbakov	669	1
Pressure-Reducing Valve DKP-6000U - V. M. Chumakov	672	2

DESIGN AND CONSTRUCTION OF MACHINERY AND EQUIPMENT

Current Trends in the Development of Designs of Submersible Pumps for Water - A. P. Chernyi	674	4
The Design of Drum Vacuum Filters without Compartments - N. V. Shpanov and N. I. Pyshkina	678	6
Investigation of the Stressed State and the Strength of Oval Cisterns of Mixing Aggregates - S. I. Amstislavskaya	682	8
Calculation of the Dynamic Characteristics of an Unsymmetrical Paddle Mixer on a Hinged Shaft - V. N. Pavlechko, I. I. Bortnikov, and I. S. Pavlushenko	685	10

INVESTIGATION AND CALCULATION OF THERMOPHYSICAL PROCESSES

A Study of the Operation of a Helium Vessel Phase Separator - V. G. Baranov, A. I. Vinnikov, and M. I. Gutkin	689	12
Intensifying the Operation of Granulating Towers in Fertilizer Production - Yu. G. Kirsanov, R. I. Kudryashova, G. I. Neupokoev, P. F. Tyugaev, A. A. Abduzhamalov, and V. E. Sitnikov	691	13
Determination of the Adiabatic Curve Indices for Mixtures of Real Gases - L. A. Serovskii, M. L. Fuks, and I. A. Elfimov	694	14
Determination of the Mean Drop Diameter in Turbulent Spraying of a Hydrophobic Liquid in Water - G. A. Krasutskii and V. I. Kostyuk	697	16

NEW MATERIALS AND CORROSION CONTROL

Use of 03Kh21N21M4GB Steel and 03KhN28MDT Alloy for Making Phosphoric Acid Extractors - Yu. S. Sidorkina, V. D. Shipilov, R. F. Larionova, and O. N. Malysheva	700	17
A Study of the Corrosion Fatigue of Hydraulic Cylinders of Carbamate Pumps - A. N. Kuzuyukov and L. B. Berezovskii	702	18

EQUIPMENT MANUFACTURING TECHNOLOGY

PP-AN106 Shielded (Coated) Metal Arc Electrode Wire for (Hard) Facing Pipeline Valve Surfaces - V. B. Ereemeev and V. P. Subbotovskii		
Variation in Vessel-Head Thickness during Forming - S. T. Lin and Yu. I. Kozlov	706	21
Fabrication of Sharply Bent Pipes and Torus-Shaped Vessels by the Method of Bending and Rolling - V. I. Ershov and M. A. Markeev	709	22
Elements of the Mechanics of the Process of the Milling of Damaged Metals in a Borehole - A. P. Gasanov	713	25

NORMALIZATION AND STANDARDIZATION

A New Standard for Mechanical Methods of Testing Glassy Enamel Coatings - L. A. Yaroshevskaya and I. G. Sherman	718	27
Classification and Unitized Assortment of Compressor Oils - E. A. Eminov, Ya. A. Bershtadt, Yu. L. Smertyak, and N. I. Koroleva	719	27

PRODUCTION ORGANIZATION AND ECONOMY

Improvement of the Tool Economy in Pipe Fittings Manufacturing Plants - L. A. Shabyshev	722	29
Improvement of Cost Accounting for Plant Sections - A. T. Klimenko	724	30

QUALITY, RELIABILITY, AND LIFETIME

Increasing the Reliability of Connecting Bolts in Opposed Compressors

— M. I. Frenkel' and Yu. I. Smirnov 727 32

Standardization of the Vibrations of the Subassemblies of Paper-Making Machines

— A. A. Sannikov and A. M. Vitvinin 731 34

EXCHANGE OF EXPERIENCE

Experience in the Standardization of the Basic Steps of Design and Construction Work

— V. S. Minin 735 36

Mechanized Removal of Cores from Large Aluminium and Copper Alloy Castings

— V. V. Dolzhnikov 739 39

New Technology for Manufacturing Beading Tools — A. N. Bachkin, V. I. Avdeev,
and V. N. Zarutskii

..... 741 40

Experience in the Use of Shields during Enameling — V. A. Gnatishin

and Yu. V. Alekseev 743 41

Two-Position Pneumatic Clamping Fixture for Honing Compressor Cylinder Liners

— S. V. Ryumin 744 42

INFORMATION

Production of New Equipment

..... 746 43

Servomotor for Turning Pump-Impeller Blades — Yu. G. Panov

..... 748 44

FOREIGN TECHNOLOGY

New Designs of Screw Pumps — V. V. Burenin and D. T. Gaevik

..... 751 46

VOLUME 12, NUMBER 9, SEPTEMBER, 1976

The Day of the Machine Builder. 757 1

NEW MACHINES AND EQUIPMENT

Submersible Electric Pump Unit for Lifting Seawater — B. V. Khimach

..... 761 3

Units for Production of Cycle Inner Tube and Casing Stock — A. G. Posternak,

N. A. Efremova, V. F. Rozhkov, and V. P. Opanasyuk 765 5

CONSTRUCTION AND DESIGN OF MACHINES AND APPARATUS

Stress-Deformation State of a Three-Layer Elliptical Bottom

— I. K. Glushko, V. I. Voronin, and F. I. Selitskii 769 7

Stresses of the Crankshafts of Opposing Compressors on an M10 Base

with Cantilevered Electric Motors — Yu. I. Smirnov 772 8

Approximate Method for Calculating the Shafts of Mixers in Multimixer

Apparatus — I. N. Karasev, V. A. Zaitsev, A. S. Gzovskii, and

A. N. Koldashov 776 10

Start-up Frictional Forces in End Packings — B. M. Kudryavtseva and

G. E. Lazarev. 778 12

INVESTIGATION AND CALCULATION OF THERMOPHYSICAL PROCESSES

Pulsations in Pressure Drop in Apparatus with a Nonuniform Fluidized Bed

— N. A. Shakhova and O. G. Shapovalova 781 13

Distribution of the Velocities of the Medium Along the Channels of a

Graphite-block Heat-Transfer Apparatus — V. G. Orlov and

G. S. Orlova 783 14

Hydrodynamics of Three-Dimensional Liquid Films in a Transverse-

Cocurrent Flow of Gas — N. I. Svitka, N. I. Gel'perin, Yu. M. Martynets,

and A. A. Chivyaga 786 16

Procedure for Calculating the Cooling of Cryogenic Liquids under a Regime

of Boiling and Surface Evaporation — A. M. Domashenko, V. P. Kachura,

and S. N. Zhulus. 789 17

NEW MATERIALS AND CORROSION CONTROL

Corrosion Damage of Tanks Transporting Refined Sulfuric Acid

— G. P. Gerasimenko, O. I. Steklov, L. B. Zhuravleva, and
A. D. Konyukov

794 20

Local Failure of 12Kh18N10T Steel in Nitric Acid Containing Various

Chlorides — G. A. Shul'gat, V. S. Pakhomov, and I. Ya. Ylinov

797 21

EQUIPMENT-MANUFACTURING TECHNOLOGY

New Materials for Arc Welding of Nickel and Results of Their Introduction

in the Chemical-Engineering Industry — G. S. Kuz'min, T. F. Mochalova,
S. N. Bazhin, and L. N. Bitinskaya

800 23

Experimental Design in Investigating the Technology of Rolling Thick-Walled

Elliptical Heads — K. N. Bogoyavlenskii and I. V. Berezin

802 24

Machining the Blanks for High-Strength Iron Rotors of Screw Compressors

— B. N. Kononenko and N. P. Kudryavskii

807 27

The Effect of Rapid Heating on the Properties of ShKh15 Steel in Assembling

Rolling Bearing Units — G. Ya. Andreev, V. I. Kushakov, and

I. E. Chernikova

809 28

ORGANIZATION AND ECONOMICS OF PRODUCTION

Development and Introduction of Internal Plant Price Lists for Tools

— Yu. G. Glazov, V. Ya. Nekhaichik, and I. G. Nastasyuk

813 30

Improvements in the Installation of Stationary Compressors

— V. A. Chepelov, L. M. Gidon, and D. S. Kosorukov

814 31

QUALITY, RELIABILITY, AND LIFETIME

Theoretical and Experimental Study of the Lifetime of Direct-Flow Valve

Membranes of Opposite Compressors — L. A. Sosnovskii and I. P. Chigrina

817 32

Efficiency of the Flat Seal of Exhaust Valves — A. Z. Volynchik,

K. A. Kozlov, I. A. Vyatkin, and S. A. Khmelev

823 35

EXCHANGE OF EXPERIENCE

Isothermal Hardening of Cylinders with the Use of Blowing with Argon

— V. V. Dolzhnikov

825 36

Single-Point Tools for Machining Ceramic Materials — K. P. Belous

825 37

INFORMATION

Production of New Equipment

38

Disk Vacuum Filter with a Thickening Device — O. L. Bruk, V. L. Radushkevich,

and M. G. Bogomol'nyi

832 39

A Unit for Heat Treating Cylindrical Parts with High-Frequency Currents

— B. L. Ledyayev, N. I. Shumovskii, and V. N. Strotskii

836 41

The Use of Polystyrene Impressions for Investigating the Microstructures

of Metals — V. D. Molchanova, A. P. Turitsina, E. I. Zubarenkov, and

S. A. Koval'chuk

838 42

Metal-Ceramic Electric Heaters for Heating Polymer Equipment

— B. L. Ositinskii

839 43

FOREIGN TECHNOLOGY

Gland Seals — V. K. Kharitonov

44

VOLUME 12, NUMBER 10, OCTOBER, 1976

IMPLEMENTING THE RESOLUTIONS OF THE 25TH CONGRESS OF THE CPSU

Competition for Efficiency and Quality of work at the "Uralkhimmash" Plant

— V. M. Makarov

849 1

Socialist Competition at the "Iivgidromash" Productive Association

— N. I. Ustinskii

854 3

	Engl./Russ.
Ways of Increasing Production Efficiency - S. G. Guliev	857 5
NEW MACHINERY AND EQUIPMENT	
NTsV 160/100AM-1-11 Fire-Fighting Electrical Centrifugal Marine Pump - V. V. Burenin.	859 6
Cooling Steam-Water Ejector Machine 18É - M. A. Sil'man	862 8
DESIGN AND CONSTRUCTION OF MACHINERY AND EQUIPMENT	
Investigation of the Stressed State and Strength of Forged High-Pressure Pipe Fittings - B. N. Dudko and E. Ya. Neiman	865 9
Strength of Side Inlets in High-Pressure Multilayer Vessels - L. B. Tsvik, P. G. Pimshtein, and E. G. Borsuk	868 11
Two-Channel System for Automatic Regulation of the Temperature in Screw-Type Machines - B. I. Olerinskii, P. A. Obnovlenskii, A. V. Bronfenbrener, and M. A. Gurevich.	873 14
Theoretical Analysis of the Work of the Masticator of a Screw-Piston Casting Machine with the Processing of a Rubber Mixture - A. A. Ashcheulov, N. I. Basov, and V. V. Mezhev.	875 15
INVESTIGATION AND CALCULATION OF THERMOPHYSICAL PROCESSES	
Gas Content of a Mechanically Agitated Liquid - A. A. Erofeev and G. N. Petykhiha...	881 18
Investigation and Development of an Evacuation (Vacuum) Process for Vessels with Vacuum-Multilayer Insulation - M. G. Kaganer, Yu. N. Fetisov, and L. M. Yurchik.	886 20
Determining Heat Leak to Helium Pipelines - I. P. Vishnev, Yu. G. Vinokur, V. A. Shaposhnikov, and E. A. Tityshin.	890 22
Effect of Number of Gauzes and of the Means of Closing Their Edges in Gauze Filters on Their Capacity - V. A. Lozhkin, B. A. Permyakov, V. P. Kovalenko, and A. N. Arkhipov.	892 24
NEW MATERIALS AND CORROSION CONTROL	
Effect of Seawater and Marine Atmosphere on the Fatigue Strength of Steel after High-Temperature Thermomechanical Treatment - L. A. Glikman, M. K. Gubarev, Yu. G. Ozhiganov, and L. N. Khokhlova.	895 25
Corrosion Resistance of High-Alloy Steels and KhN65MV Alloy in Some Media for the Synthesis of Terephthalic Acid by the Oxidation of P-xylene - Yu. I. Perin, R. A. Valieva, L. K. Burmistrova, and G. E. Kuznetsova.	898 27
Chemical Resistance of Rubbers in the Vapors of Aggressive Media - V. V. Shubin and E. G. Kogan.	900 28
EQUIPMENT MANUFACTURING TECHNOLOGY	
Induction Facing of the Rotating Sleeves of Face Packings - Yu. P. Oshchepkov, S. A. Lapkin, V. E. Babenko, N. V. Oshchepkova, A. Ya. Khomko, and V. V. Kuznetsov.	902 28
A Method of Attaching Pins to the Tubes of Tube Furnaces - Yu. M. Berezhnov, A. I. Bessonov, A. F. Boldyrev, A. S. Gel'man, and É. S. Slepak.	905 30
Investigating the Processes of Polishing and Buffing in Vibration Machines - A. V. Bychekova, A. P. Gubanov, M. B. Zhitomirskii, V. S. Kut'yakov, and N. G. Usankin.	908 31
Analytical Determination of Some Parameters of the Photoelectric System for the Testing of Shells - A. N. Rabinovich, A. N. Shilin, and E. P. Lebas.	909 32
ORGANIZATION AND ECONOMICS OF PRODUCTION	
Determination of Long-Term Requirements of Pumping Equipment - V. A. Nikolaev, G. V. Shul'gin, and S. I. Pozdnyakova.	913 34

QUALITY, RELIABILITY, AND LIFETIME

A New Flexible Metallic Hose Articulated Coupling Construction for Cementing Aggregates - G. A. Vylegzhanin	916	35
Increasing the Lifetime of Well Cutters - V. A. Ali-Zade and A. P. Gasanov.	917	36

EXCHANGE OF EXPERIENCE

Mechanized Section for Assembly and Welding of Turbine Rotors - R. A. Idiatulin and A. M. Abdurakhmanov.	921	37
Machine for Automatic Loading of Bulk Materials in Containers - G. I. Lidman	923	39
Improved Layout Technique for Conical Elements - M. V. Kanevskii	924	39

INFORMATION

Production of New Equipment	926	40
Instruments with a Micrometric Level for the Control of the Parts of Paper-making Equipment - G. F. Kushner	929	42
Unit for Centralized Measurement and Control of Parameters with Plant Tests of Equipment - O. V. Lyubomirskii, V. L. Rublev, and V. A. Ivanyuk	933	44
Experimental Investigation of a Helium Cryogenic Ejector - A. I. Ageev, N. N. Agapov, and V. A. Belushkin.	936	45
Machine for Profile Cutting of Rubber and Ebonite Stock - A. A. Shabanov, V. E. Kutukov, N. N. Eremina, and H. P. Khramtsova	938	46

VOLUME 12, NUMBER 11, NOVEMBER, 1976

To the Motherland of October - High-Quality Production	943	1
IMPLEMENTING THE RESOLUTIONS OF THE 25TH CONGRESS OF THE CPSU		
Production with the State Sign of Quality at the Sumy Machine-Building Production Combine - V. M. Luk'yanenko	949	4
From the Experimental Certification of Articles to a System for Control of the Quality of Labor - G. G. Lapitskii	955	7
Reserves - Into Action - V. G. Tyugin	960	9
NEW MACHINERY AND EQUIPMENT		
The AKh 280/42 (E, I) Chemical Centrifugal Electric Pump - V. V. Burenin	966	12
A Safety Valve for Corrosive Media - G. G. Zhiburtovich, M. F. Podlipskii, and I. Kh. Paikin	969	13
CONSTRUCTION AND DESIGN OF MACHINES AND APPARATUS		
Calculation of a Self-Sealing Seal with a Wave-Shaped Obturator - V. I. Livshits, V. K. Pogodin, and A. K. Drevin	971	14
Standardization of the Technical State of the Crankshafts of Opposing Compressors with Cantilevered Electric Motors - Yu. I. Smirnov	975	16
Investigation of a Hydraulic End Seal with Grooves at the Working Surface of a Rotating Disk - V. I. Sokolov and E. V. Shataev	979	18
Centrifugal Hydraulic Motor for Conveyor Centrifuge Drive - A. P. Tsybul'nik	982	19
Temperature Deformations of Contact Linings of Thermoplastic Materials - E. B. Fel'dman, L. M. Shterenlikht, and S. I. Makhonin	985	21
INVESTIGATION AND CALCULATION OF THERMOPHYSICAL PROCESSES		
Analysis of the Thermodynamic Efficiency of a Heat Exchanger As An Element of a Low-Pressure Cryogenic Setup - V. I. Epifanova, O. A. Ivakin, and Kh. A. Temirov	990	23

Apparatus for Preliminary Drying of Air Using a Coolant - V. E. Gorelov, V. V. Usanov, and A. A. Zharov	996	26
Heat Transfer from Single Studded Tubes - A. S. Lyshevskii, V. G. Sokolov, L. Ya. Shkret, A. A. Kutukov, V. M. Sychev, and A. N. Lobkov	1001	28
Determination of the Moment of the Velocity of the Flow Behind the Guiding Apparatus of an Intermediate Stage of a Multistage Centrifugal Pump - A. I. Biryukov, N. N. Kochevskii, and E. I. Yankin	1006	31

TECHNOLOGY OF FABRICATION OF EQUIPMENT

Pressing Fitting for the Cold Calibration of the Bottoms of Apparatus by the Method of Compression - V. P. Luk'yanov, E. D. Gorokhov, and L. V. Obrushnikov	1008	32
The Mechanical Properties of Steels During Manufacture of Bottoms by Various Methods - Yu. G. Tokarev, Yu. I. Kozlov, and S. T. Lin	1011	33
Properties of Welded Seams in 12Kh18N10T Steel Which Have Been Made in an Atmosphere of CO ₂ or a Mixture of CO ₂ and O ₂ - V. N. Pozdeev	1013	34
Calculation of the Diameter of Blanks for Rolling Trapezoidal Threads - G. P. Mostalygin and V. N. Orlov	1015	35
Improvement in the Technology of the Casting of the Cast-Iron Bushings of Deep Pumps - M. I. Abbasov, T. G. Geokhchaev, T. M. Asadov, M. G. Shirinov, and A. A. Kulizade	1017	36

ORGANIZATION AND ECONOMICS OF PRODUCTION

Improving Specialized Worker On-The-Job Training - A. B. Krutik and B. V. Stepanov ..	1019	37
Calculation of Equipment Requirement on the Basis of the Optimization of Production Plans - L. V. Alievskaya, V. I. Livshits, and L. L. Leont'eva	1020	38

EXCHANGE OF EXPERIENCE

System for the Removal of Water and Slime from an Electrohydraulic Unit for the Stamping of Bars from Ingots - A. P. Basargin and M. D. Shein	1024	39
Welding Butt Joints of Thick Sheet Polyethylene - V. G. Durzhnov	1025	40
An Accelerated Method for Determining the Silicon Content of Carbon Steel - V. G. Evseeva and E. V. Shtyrenkov	1027	41

INFORMATION

Production of New Equipment	1028	41
Results of Testbed and Industrial Testing of Ts2NSh-750 Reducers with 7SK 12-2.5-4000Sh Pumping Units - K. B. Aliev and R. M. Mirzabekov	1033	44
Mixer-Settler-Type Extractor with Controlled Emulsion Recirculation - I. G. Larionov, G. I. Smirnov, V. Ya. Semenov, O. N. Kostromina, and L. A. Stameikina	1035	45
Vibratory Filtering Centrifuge for Drying Wet Products - V. N. Skvortsova, A. V. Shlau, V. I. Asner, V. S. Gershanov, I. K. Drankovskii, G. D. Safronkin, and N. P. Dodin	1037	46

FOREIGN TECHNOLOGY

Survey of Bellows Expansion Joint Construction - L. D. Lugantsev, E. A. Meshcheryakov and V. I. Mosolov	1040	47
--	------	----

VOLUME 12, NUMBER 12, DECEMBER, 1976

IMPLEMENTING THE RESOLUTIONS OF THE 25TH CONGRESS OF THE CPSU

Increasing the Quality and Efficiency of Cryogenic Equipment in the "Kriogenmash" Nongovernmental Organization - V. P. Belyakov	1043	1
The Most Reliable and High-Capacity Equipment - the Seal of Quality - A. N. Sukhorukov ..	1047	3

NEW MACHINES AND APPARATUS

Dry Protective Devices for Acetylene and Gas-Substituents - V. I. Skvortsov and L. M. Gurevich	1049	4
---	------	---

An Experimental Hydrocracking Reactor with an Internal Thermally Insulated Shell — V. V. Ivantsov, V. G. Usenko, S. V. Lashuk, and B. I. Bondarenko	1052	6
New Constructions of Type ÉTsV Electrical Well-Pump Assemblies — B. V. Khimach and I. S. Gurevich	1054	6
DESIGN AND CONSTRUCTION OF MACHINERY AND EQUIPMENT		
Selection of a Ductility Criterion for Determining the Limiting State of Vessels of Titanium Alloys — K. V. Smol'skii, V. I. Rachkov, and S. M. Kutepov	1057	8
Investigation of the Stress — Deformation State and Carrying Capacity of Stamped Spherical T-Joints — L. A. Zakharchenko, E. M. Chechik, and I. S. Valiev	1061	10
Investigation of the Limiting State of Thick-Walled Pipelines with the Simultaneous Action of a Bending Moment and Pressure — B. P. Sergiev	1064	12
INVESTIGATION AND CALCULATION OF THERMOPHYSICAL PROCESSES		
Investigation of the Capacity of the Charging Zone of a Single-Screw Extruder — B. A. Petrov, V. V. Skachkov, V. S. Kim, and K. A. Salazkin	1069	14
Calculation of Hardening and Cooling Processes of Dispersed Melts of Caustic Alkalies in a Column Granulator — N. I. Gel'perin and I. A. Egorov	1073	17
Investigation of Heat Exchange during Condensation and Boiling of Freons on Plate-Finned Surfaces — I. G. Aver'yanov, K. D. Kan, V. B. Galezha, and V. R. Gopin	1077	19
An Experimental Investigation of Heat Exchange for Oil Heat Carriers during Turbulent Motion in a Straight Tube — A. V. Chechetkin and V. A. Shapkhayev	1080	21
NEW MATERIALS AND PREVENTION OF CORROSION		
Wear Resistance of the BSG-60 Borosilicided Graphite — V. M. Mikhlin, G. E. Lazarev, A. N. Shurshakov, I. I. Godunov, and I. I. Rykov	1085	23
Investigation of the Resistance of Titanium Alloys to Cyclic Impact Loads — V. N. Ovcharenko, L. A. Sosnovskii, and V. A. Yakovlev	1087	24
EQUIPMENT MANUFACTURING TECHNOLOGY		
Production Technology of Alloy 0KhN40MDTYu Forgings for Centrifugal Separator Parts — A. L. Belinkii, V. D. Zhdanov, and G. A. Zheltova	1091	26
Technology of Producing All-Welded Impellers for Centrifugal Compressors — V. N. Radzievskii, V. I. Ryman', and V. Yu. Chernov	1093	27
Optimal Blanks for Piston Rings of Compressors — D. M. Krymskii and A. T. Darii	1095	29
An Investigation of the Kinetics of the Vibration Lapping Process — A. T. Ezhov	1097	30
An Investigation of the Effect of Surface Roughness on the Labor Consumption in Abrasive Working — A. N. Ovseenko	1100	31
STANDARDIZATION		
International Standardization of Refrigeration Equipment — A. V. Bykov, I. M. Kalnin', Yu. O. Mukhin, and V. B. Shpentser	1102	32
Branch Standard for Axial Wave-Type Compensators — Yu. I. Berliner and V. S. Baranova	1105	34
Sealing of Pumps — O. V. Yaremenko and G. A. Orlov	1107	35
QUALITY, RELIABILITY, AND LIFETIME		
Estimation of the Reliability Indices of Liquefied-Gas Pumps by Use of an Electronic Digital Computer — B. G. Blyukher	1108	35
Increasing the Impact Fatigue Strength of Ring Valve Plates — V. A. Pyshkin, V. A. Yakovlev, V. Yu. Kuznetsov, and S. A. Abramenko	1114	38
INFORMATION		
Steel Multilayer Bellows for High-Pressure Fittings — A. I. Lavrent'ev, M. I. Kabel'skii, V. P. Galai, and Yu. M. Sorokin	1116	39
Test Use of Type ASD-100 Dewar Vessels — A. I. Zemzerov, G. P. Kirillina, and A. N. Shiryaev	1117	40
Two-Point, Two-Channel, Low-Frequency Control and Signalling Device DNKSA-K-1 — Kh. N. Usmanov and B. P. Mishin	1118	41

Remote Control of Sources of Welding Current — V. I. Kirillov and D. G. Sharenko	1121	42
INDEX		
Author Index, Volume 12, Numbers 1-12, 1976	1125	
Tables of Contents, Volume 12, Numbers 1-12, 1976	1131	

The first of these is the fact that the data is not normally distributed. This is evident from the fact that the distribution is skewed to the right, with a long tail extending to the right. This is a common feature of many real-world data sets, and it is important to be aware of it when analyzing the data.

The second of these is the fact that the data is not independent. This is evident from the fact that the data points are correlated. This is a common feature of many real-world data sets, and it is important to be aware of it when analyzing the data.

The third of these is the fact that the data is not stationary. This is evident from the fact that the mean and variance of the data are changing over time. This is a common feature of many real-world data sets, and it is important to be aware of it when analyzing the data.

The fourth of these is the fact that the data is not normally distributed. This is evident from the fact that the distribution is skewed to the right, with a long tail extending to the right. This is a common feature of many real-world data sets, and it is important to be aware of it when analyzing the data.

The fifth of these is the fact that the data is not independent. This is evident from the fact that the data points are correlated. This is a common feature of many real-world data sets, and it is important to be aware of it when analyzing the data.

The sixth of these is the fact that the data is not stationary. This is evident from the fact that the mean and variance of the data are changing over time. This is a common feature of many real-world data sets, and it is important to be aware of it when analyzing the data.

The seventh of these is the fact that the data is not normally distributed. This is evident from the fact that the distribution is skewed to the right, with a long tail extending to the right. This is a common feature of many real-world data sets, and it is important to be aware of it when analyzing the data.

The eighth of these is the fact that the data is not independent. This is evident from the fact that the data points are correlated. This is a common feature of many real-world data sets, and it is important to be aware of it when analyzing the data.

